

What maths looks like in Shoreham Village School

Features of a successful mathematics lesson utilising a mastery approach include:

Planning and design

- ✓ Coherent, carefully sequenced learning steps: each part of the lesson supports the children accessing the next part.
- ✓ 'Ping Pong' instructional model: there is a high level of back and forth between teacher instruction and pupil activities, e.g. a six-part lesson.
- ✓ Conceptual variation: the mathematical concept is presented in a variety of ways so children are able to discern the essential features.
- ✓ Multiple representations: a variety of manipulative and pictorial representations have been used to explain the mathematical concept.
- ✓ Procedural variation: questions have been chosen with care to demonstrate a particular concept, ensuring that calculations are more than simply finding an answer, but about understanding patterns and concepts too.
- ✓ Depth for all: every child in the lesson has the opportunity to apply their key learning through extension, application, reasoning or problem solving (or a combination).
- ✓ Scaffolding: support is available for those who need it (this could be additional concrete resources or further support from the teacher in a focus group).

Delivery Collaboration

- ✓ Talk tasks in groups or pairs to develop understanding

- ✓ Transition time between activities used for mathematical chants, rhymes or songs

Communication

- ✓ Accurate and appropriate vocabulary is used by all

- ✓ Stem sentences are available and referred to in order to provide clarity on how to speak mathematically

Curiosity

- ✓ There is an opportunity to develop mathematical fluency

- ✓ Children have the opportunity to go from specific examples of concepts to developing these into general rules